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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,661	05/14/2001	Yuji Yoshida	01165.0817	7010

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EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/831,661

Applicant(s)

YOSHIDA ET AL.

Examiner

Jennifer A Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2, 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The Applicant's Amendments and Accompanying Remarks, filed June 5, 2003, have been entered and have been carefully considered. Claim 3 is cancelled, claims 4 – 8 are added, claim 1 is amended and claims 1 – 2 and 4 – 8 are pending.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1 – 2 and 4 – 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claims 1 – 2 and 4 – 8, the phrase "raschel-type" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "type"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). It is suggested to the Applicant to replace the term "raschel-type" with "raschel".
6. Claim 7 is indefinite because the Examiner is unclear of the meaning of "a triconet structure". Does the Applicant intend "tricot"? It should be noted that, according to *Complete Textile Glossary* by Celanese Acetate, warp knitting structures are commonly divided into three

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broad structure categories: milanese, raschel and tricot. If the Applicant did in fact mean "tricot" instead of "triconet", a tricot knit cannot be a "raschel" knit because they are two separate categories. Therefore, the use of "raschel" in the preamble and "tricot" in the body of the claim would be contradicting. For the purpose of examination at the time of claim 7, the Examiner will assume that the Applicant intends that the knit is any type of warp structure.

Claim Rejections - 35 USC § 103

7. Claims 1 – 2 and 4 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondou et al. (US 5,250,351) in view of Kimura et al. (US 4,475,330).

As to claim 1, Kondou et al teaches an elastic warp knitted fabric is created by inserting an elastic yarn into sinker loops of a ground knitted weave constituted with a nonelastic yarn (column 7, lines 5 – 10). The elastic yarn comprises a urethane group (column 5, lines 55 – 57) and the nonelastic yarn such as a polyester fiber (column 6, lines 25 – 35).

Kondou et al. teaches the use of a generic polyester yarn but does not teach the specific type of polyester used in knitted fabric.

Kimura et al. teaches a knitted crepe fabric made from a multifilament yarn comprising trimethylene terephthalate (Abstract).

Since Kondou et al. lacks specific disclosure to the type of polyester used, it would have been obvious and necessary to one of ordinary skill in the art at the time the invention was made to use an appropriate polyester such as polytrimethylene terephthalate taught by Kimura, motivated by the expectation of successfully practicing the invention of Kondou.

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Polytrimethylene terephthalate does not yellow, has excellent elastic recovery and good dimensional stability which would be highly desirable in fabric for garments.

As to claim 1, Kondou et al. in view of Kimura et al. discloses the claimed invention except for the knit having 100 to 200 courses per 2.54 cm and 4,000 to 8,000 wales per 2.54 cm. It should be noted that the number of courses and wales per 2.54 is a result effective variable. For example, increasing the number of courses and wales creates a sturdier and tighter fabric. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a knit having 100 to 200 courses per 2.54 cm and 4,000 to 8,000 wales per 2.54 cm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the current invention, it would have been desirable to have 100 to 200 courses and 4,000 to 8,000 wales per 2.54 cm in order to provide a soft yet durable fabric desirable for high-performance and stretchable clothing.

As to claim 2, Kondou teaches the knitted fabric is manufactured using a raschel knitting machine (column 7, lines 13 – 15) and can be a satin net structure (column 7, lines 19 – 23).

As to claim 4, Kondou teaches the above disclosed raschel warp knit. Kondou teaches that the knit fabric can be a six course satin net structure (column 7, lines 19 – 23). Kondou teaches that the fabric is made by applying a wet heat process comprising a scouring treatment and a dyeing treatment to a relaxed grey fabric and then applying a finishing set (column 10, lines 3 – 23). The resulting fabric would have the parameters as disclosed above and would be a dyed, heat-set knitted fabric. It should be noted that even though product-by-process claims are

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limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or an obvious variant from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the Applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

As to claim 5, Kondou teaches that the elastomeric fiber is a polyurethane base yarn (column 5, lines 55 – 64)

As to claim 6, Kondou teaches that the knitted fabric is a power net structure (column 7, lines 19 – 23).

As to claim 7, Kondou teaches the knitted fabric is a warp knit (Abstract).

As to claim 8, it should be noted that the method of forming the article is not germane to the issue of patentability itself. Therefore, this limitation has not been given any patentable weight.

8. Claims 1 - 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondou et al. (US 5,250,351) in view of Hirt et al. (US 5,782,935).

9. Kondou et al teaches an elastic warp knitted fabric is created by inserting an elastic yarn into sinker loops of a ground knitted weave constituted with a nonelastic yarn (column 7, lines 5 – 10). The elastic yarn comprises a urethane group (column 5, lines 55 – 57) and the nonelastic yarn such as a polyester fiber (column 6, lines 25 – 35). The knitted fabric is

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manufactured using a raschel knitting machine (column 7, lines 13 – 15) and can be a satin net structure (column 7, lines 19 – 23) as required by claim 2.

Kondou et al. teaches the use of a generic polyester yarn but does not teach the specific type of polyester used in knitted fabric.

Hirt teaches a process for coloring polytrimethylene terephthalate fibers (Abstract). In Figure 2, it is shown that more colorant is absorbed by polytrimethylene terephthalate (PTMT) fibers than polyethylene terephthalate (PET).

Since Kondou et al. lacks specific disclosure to the type of polyester used, it would have been obvious and necessary to one of ordinary skill in the art at the time the invention was made to use an appropriate polyester such as polytrimethylene terephthalate taught by Hirt, motivated by the expectation of successfully practicing the invention of Kondou. Polytrimethylene terephthalate has better dyeability, especially at lower temperatures, which saves time and money in the fabric processing.

As to claim 1, Kondou et al. in view of Hirt et al. discloses the claimed invention except for the knit having 100 to 200 courses per 2.54 cm and 4,000 to 8,000 wales per 2.54 cm. It should be noted that the number of courses and wales per 2.54 is a result effective variable. For example, increasing the number of courses and wales creates a sturdier and tighter fabric. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a knit having 100 to 200 courses per 2.54 cm and 4,000 to 8,000 wales per 2.54 cm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the current invention, it would have been desirable to have 100 to 200 courses and 4,000 to

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8,000 wales per 2.54 cm in order to provide a soft yet durable fabric desirable for high-performance and stretchable clothing.

Response to Arguments

10. The Examiner has considered Applicant's arguments filed June 5, 2003, however, in order to be effective, the Examiner strongly suggests to submit the arguments by way of an oath or declaration under 37 CFR 1.132.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jennifer Boyd
September 5, 2003

